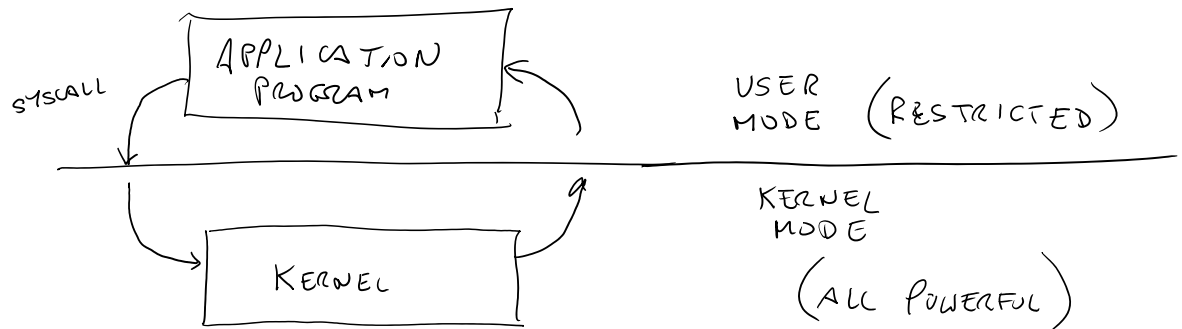


Lecture 7 - Memory & Stack Operations

Thursday, February 13, 2020 11:02 AM

- Objectives:
- Learn about the MIPS virtual and physical memory
 - Learn how the stack is implemented
 - Learn how the stack is used to pass arguments and return values
 - Learn how the stack is used to support nested functions



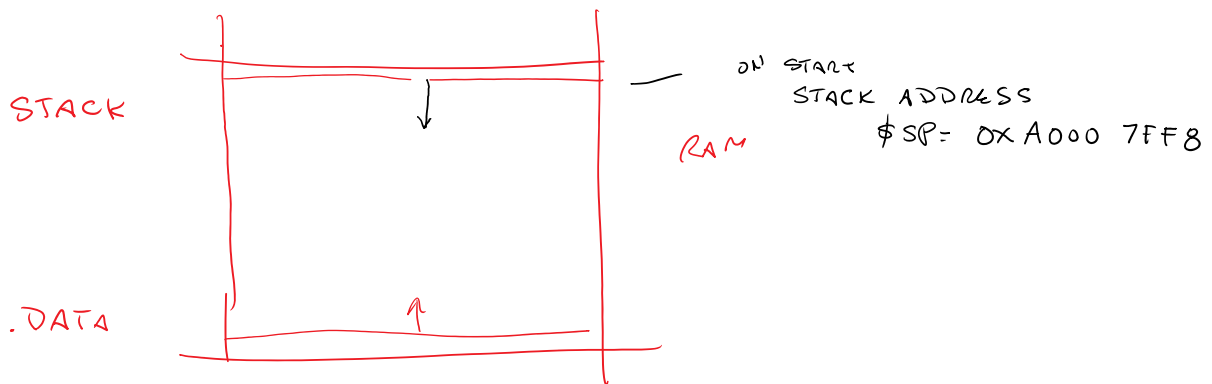
INSTRUCTION DECODING

0x01024020

0000 0001 0000 0010 0100 0000 0000 0000

6 5 5 5 5 6

\$8 \$2 \$8



CALLING A FUNCTION

Jal Test.FUNCTION

Next INSTR.

address of next_instr $\rightarrow \$ra$

address of Test.FUNCTION $\rightarrow \$PC$

when test-function is finished

jr \$ra

contents of \$ra \rightarrow \$PC

— contents of §ra → §pc